

**BASSO**  
LUCERNARI



**EXS\_SMOKE\_HEAT VENT**

REGULATION EN 12101 - 2



# EXS

## SMOKE\_HEAT VENT

## LESS SMOKE, MORE SECURITY

The first thing to do when a fire starts is to direct the removal of smoke and heat. By doing this the risk of intoxication and accidents caused by the rush of people to exits can be reduced and it will be easier to carry out first-aid. Thanks to its automatic opening using the revolutionary EXS mechanism, the new smoke-heat vent, researched and patented by Basso Lucernari, creates a layer of smoke-free air at ground level therefore making it easier for authorities to intervene. Used daily EXS works as an opening skylight for the ventilation of industrial and commercial environments, certified according to regulation EN12101-2 as required by CE marking. It is the most advanced fruit of Basso Lucernari's research, being a technologically innovative product as well as an extra safety measure for the working environment.

### EXS . COMPONENT CHARACTERISTICS



#### BASE

The base frame is made from folded galvanized steel with a thickness of 15/10mm and height of 300mm.

#### OPENING FRAME

Made with a double frame in natural aluminum with a section of 45x30x2mm for the fixed frame and 45x58x2mm for the opening frame. The two frames are joined by an aluminum hinge fitted with stainless steel pins.

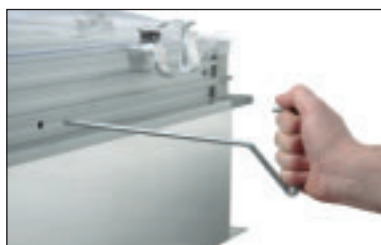
#### OPENING MECHANISM

The vent is opened using a pneumatic cylinder activated by a safety circuit and is stopped by an opening gas spring. The mechanism is activated by a heat sensitive tube at 68°/93°C which triggers the perforation of the CO2 canister and so opens the vent by around 165°.

#### COVER

The cover consists of a thermoformed dome, single, double, triple wall, crown shape, in original synthesis Perspex. The dome is fixed to the supporting base with brackets made from silver anodized aluminum alloy, "Easy block" (Basso Lucernari patented), researched for quick installation "quick release" without use of screws. The cover can be made from alveolar polycarbonate curved using cold treatment and supported by aluminum ribs or with a sandwich panel and flat polycarbonate pane.

#### RELEASE LEVER FOR INSPECTION



#### INSPECTION

As required by current regulations, it must be possible to open the vent from the outside for general maintenance. This operation is carried out by means of a removable release lever, designed by Basso Lucernari, which prevents the vent from being opened by unauthorized persons.

#### PERFORMANCE AND CLASSIFICATIONS

Reliability RE50 – Opening under weight SL1000 – Low environment temperature (T00) – Wind load WL 1500 – Heat resistance B300.

# [ QUALITY AND DESIGN ]

## A WINNING FORMULA

REGULATION EN 12101 - 2



# EXS

**SMOKE\_HEAT VENT**

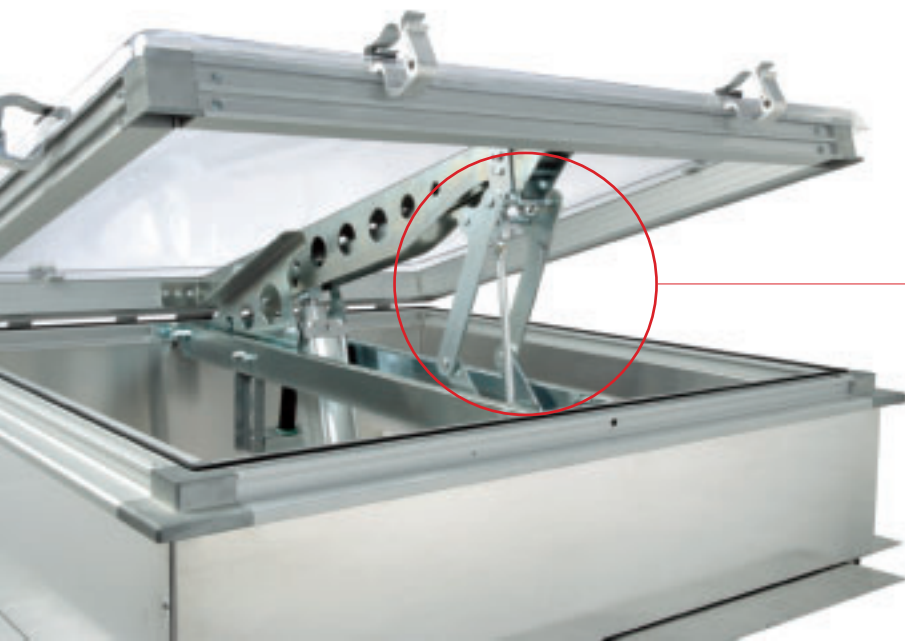
New opening mechanism  
for daily ventilation

New fire-proof  
opening mechanism

Top quality  
attention to detail

Extremely reliable  
research into sturdiness





# EASY AIR

EASY AIR mechanism  
for daily ventilation

## Optional EASY AIR DAILY VENTILATION

### AN INNOVATIVE OPENING MECHANISM FOR DAILY VENTILATION

EASY AIR is an innovative opening mechanism with a single electrical or pneumatic actuator and a double leverage system. This optional component means that the vent can be used as a normal opening skylight.  
A real change from traditional opening mechanisms.

#### ADVANTAGES

- Using a single thrust point the synchronism-parallelism of using two actuators is avoided (used in traditional mechanisms)
- When using one single actuator and the leverage mechanism the opening vent is stable even in gusts of wind.
- The double leverage system counter balances the depression load making it possible, in the case of strong wind, to offload pressure from the inside out, not on the actuator shank but on the leverage mechanism which is stronger and more stable.
- The opening mechanism can be installed at any time even with the vent already mounted to the cover.



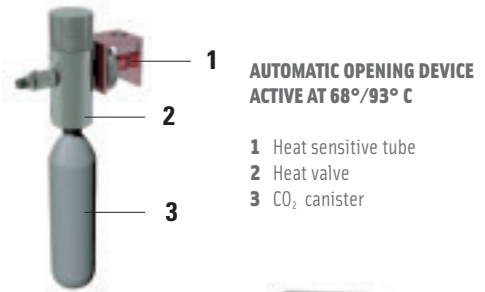
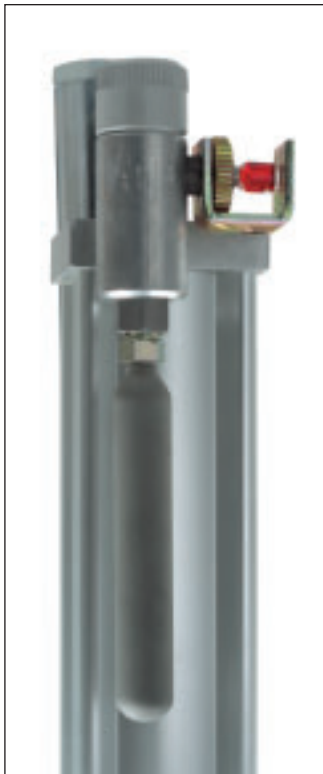
Electrical actuator  
220V or 24V  
300mm travel



Pneumatic cylinder  
300mm travel

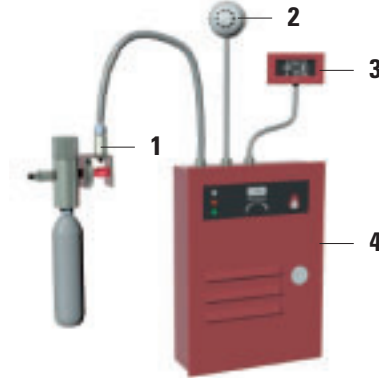


# LONG RANGE OPENING DEVICES



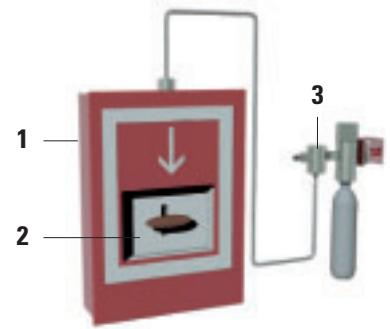
**1** AUTOMATIC OPENING DEVICE  
ACTIVE AT 68°/93° C

- 1 Heat sensitive tube
- 2 Heat valve
- 3 CO<sub>2</sub> canister



**AUTOMATIC OPENING DEVICE ACTIVE AT 68°/93° C FITTED WITH SMOKE DETECTOR AND EMERGENCY BUTTON. CAN ALSO BE ACTIVATED AS PART OF A SET.**

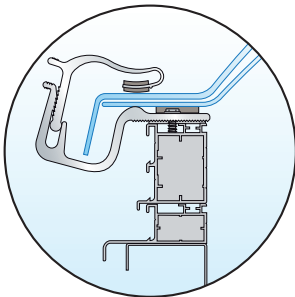
- 1 Pyrotechnic actuator
- 2 Smoke detector
- 3 Emergency button
- 4 Control unit



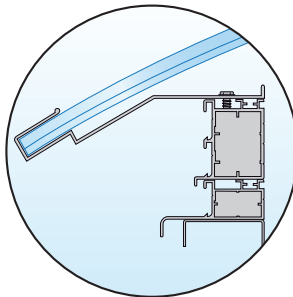
**AUTOMATIC OPENING DEVICE ACTIVE AT 68°/93° C FITTED WITH CO2 CANISTER BOX. CAN BE OPERATED INDIVIDUALLY OR AS PART OF A SET USING A MANUAL LEVER.**

- 1 Canister box
- 2 Manually operated lever
- 3 Selector valve

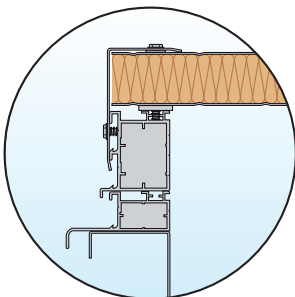
## COVER TYPES



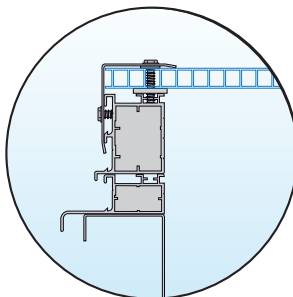
**DOMES**



**CURVED ALVEOLAR POLYCARBONATE**



**SANDWICH PANEL**



**POLYCARBONATE FLAT PLANE**

### AVAILABLE SIZES

SQUARE	Surface area m <sup>2</sup>
80 x 80	0.50
100 x 100	0.70
120 x 120	0.93
150 x 150	1.40
RECTANGULAR	Surface area m <sup>2</sup>
80 x 130	0.70
80 x 180	0.93
80 x 220	1.12
80 x 230	1.20
100 x 130	0.85
100 x 150	0.93
100 x 160	1.02
100 x 200	1.30
100 x 220	1.40
100 x 230	1.43
100 x 250	1.60
120 x 170	1.30
120 x 220	1.63
120 x 250	1.85
150 x 220	2.02
150 x 230	2.11
150 x 250	2,30

Other sizes are available on request.

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